## **ABSTRACT**

The present invention provides a particle size distribution measuring apparatus which can enhance the precision and the reliability of measurements by eliminating the region of the particle size having inferior measuring precision and resolution.

The particle size distribution measuring apparatus according to the present invention has a cell for receiving particles, a light source section for irradiating laser lights with a plurality of wavelengths to the cell, a detector for measuring the intensity of a direct light passing through the cell and the scattered lights at a plurality of scattering angles, and an arithmetic processing section which determines the particle size distribution by using the laser light of one wavelengths for the region of the particle size having low sensitivity at another wavelength in the whole range of the particle size to be measured to compensate the sensitivity of the region.